

**Net Metering Workshop organized by the California Energy Commission**  
**On November 18, 2002 at the Secretary of State Building, Sacramento**  
**Chair: Scott Tomashefsky, CEC**

**Meeting Minutes**  
**December 9, 2002**

**Attendees:**

Armen Abrahamian, SCE  
Pat Aldredge, SCE  
Manuel Alvarez, SCE  
Julie Blunden, Xenergy  
Andy Brown, Ellison, Schneller  
Susan Buller, PG&E  
Petrina Burnham, SDG&E  
Jose Cervantes, City of San Diego  
Herb Clowers, Hess  
Steven Cutler, RCM Digesters  
Tom Dossey, SCE  
Carrie-Lee Early, CMUA  
Dan Fitzpatrick, Power Measurement  
Mike Iammarino, SDG&E  
Doug Hansen, SDG&E  
Darcie Houck, CEC  
Jerry Jackson, PG&E  
Ken Krich, Sustainable Conservation  
Bob Lilly, Hess Microgen  
Robin Luke, RealEnergy  
Anthony Mazy, CPUC/ORCA  
Joe McCabe, CEC  
Edan Prabhu, Reflective Energies  
Jim Skeen, SMUD  
Laura Rudison, SCE  
Lee Ruth, World Water Corporation  
Dylan Savidge, PG&E  
Chuck Solt, Lindh and Associates  
Jonathan Teague, DGS  
Scott Tomashefsky, CEC  
Tim Tutt, CEC

On Conference line:  
Werner Blumer, CPUC

Note: Some of the above people attended only part of the meeting.

## **Introduction:**

Scott Tomashefsky opened the meeting. He stated that the purpose of the meeting is to attempt to come to a common understanding of the interpretation of two recently enacted California laws: AB 2228 and AB 58. The meeting will not evaluate the merits or concerns with the value of Net Metering. Scott requested the attendees offer subjects for discussion during the meeting. The following were suggested:

- o The relationship between Net Metering and Rule 21 and potential changes to Rule 21 to allow for interconnection of Net Metering projects.
- o Concerns about how existing Net Metering programs will be impacted by the new laws
- o Treatment of hybrid generation projects that include renewables and non-renewables

PG&E has passed 2000 “E Net” projects (for PV and wind with previous Net Metering and other rules) totaling 5.5 MW approved and pending. PG&E now has E Net on-line in order to help its customers who desire.

SDG&E has about 500 for about 4 megawatts projects in various stages of approval or complete.

Edison has about 1500 Net Metering with about 600 on line; Edison has 2.5 MW already installed out of 6 or 7 MW applied for.

SMUD has 1200 projects with up to 4 MW of Net Metering.

## **AB 58 Discussions:**

AB 58 modifies CPUC Code 2827. Section 2 (e) (1) of AB 58 requires the Utility to normally approve Net Metering applications within 30 days of receipt of a completed application subject to certain conditions.

Section 2 (e) (2) of AB 58 requires the Utility to normally approve interconnection requests within 30 days of receipt of a completed application.

There was some discussion as to whether these are two separate thirty-day clocks (work days) that run independently, or in series, and if so, shouldn't the clock under Section 2(e)(2) would start first?

Furthermore, not all interconnection requests are for Net Metering, and some Net Metering requests are already interconnected.

The Utilities must wait upon notification from the CPUC before filing proposed tariffs under the new law. The Utilities will seek to find common positions to address the issues raised.

While there are time limits imposed upon the Utilities, there are no time limits imposed on the customer who is planning to install DG to take advantage of Net Metering. Several approved Net Metering applications are not installed for long periods following approval, sometimes even more than one or two years. The Utilities are not obligated to allow Net Metering when the aggregate exceeds one-half of one percent of the aggregate peak within each service territory. This raises the question of whether an applicant seeking Net Metering may keep its place in line, and if not, what criteria should determine the priorities and which applications should be terminated. It was generally felt that the limits imposed by the legislation were high enough that this question may be deferred to the future.

Another question raised was whether Utilities were obligated to entertain Net Metering requests from Direct Access customers. It was generally felt that Direct Access Customer should make the Interconnection Application to the Utility, but metering and payment for electrical energy should be addressed between that customer and the Direct Access Service Provider.

There was some discussion about language in AB 58 regarding whether the Public Purpose Program and other non-by passable charges are applicable to Net Metered Customers. The legislation does provide sufficient guidance on how these charges should be applied.

Departing load charges will apply to customers who have interconnected DG. However, customers who install DG that is never interconnected are not required to pay Departing Load charges.

There was discussion about how the Utility would determine whether “local and state permits required to commence construction” have been received and whether the applicant has “completed construction” (reference Section 4 of AB 58, CPUC Code 2827.7). This will probably be done on a case-by-case basis.

The Utilities must find a way to determine Departing Load charges without installing meters to determine the amount of departed load. The Utilities will consider ways to achieve this, such as an algorithm to approximate departing load. It was suggested that the Utilities make filings that are virtually identical, such as was the case with Rule 21. The Utilities agreed to work together to make their filings as close to each other as possible.

There was some debate on the metering instrument itself. Traditional spinning disc meters do run backwards, and can therefore “net meter” power flowing to and from the Utility. Some modern electronic meters that allow automated meter reading do not run backwards and are not acceptable for net metering. Each of the Utilities agreed that for

residential customers they replace the meter at no cost to the customer. For larger TOU customers, the process is more complex, and metering is a part of the cost of interconnection.

## **AB 2228 Discussions**

AB 2228 addresses net metering from anaerobic digesters such as dairies and becomes effective on January 1, 2003. It requires that a tariff be filed by March 1, 2003. Its sunset date is January 1, 2006.

There was some discussion on whether all biosolid digesters qualify, or only dairy biosolids and dairy waste qualifies under AB 2228. Some provisions address only dairies whereas others are more general.

Ken Krich who was instrumental in developing the Bill and helped get the bill through the legislature stated that his intent was only dairies, but was not opposed to other biosolids digesters who may be able to take advantage of the legislation.

This is the first known requirement where Net Metering is imposed on a cluster of meters. This raised several questions:

- o How should power generated be offset against several meters?
- o Which meters get precedence in the offsetting process?
- o What if some of the metered charges being offset are on different tariffs/
- o What if the meters are under similar but non-identical names, such as a farming corporation and a family residence?
- o What does “property adjacent or continuous to the dairy” mean?
- o How broadly can “aggregate the electrical load of a dairy operation under the same ownership, including, but not limited to...” be interpreted?

Does AB 2228 require monthly billing or annual billing? It is monthly billing, with an annual true up?

The definition of “Eligible biogas digester” is a generating facility used to produce electricity by either a manure methane production project or as a byproduct of the anaerobic digestion of bio-solids and animal waste.” It also references a biogas digester as ” the recipient of local, state, or federal funds, or who self-finances pilot projects designed to encourage the development of eligible biogas digester generating facilities.” How broadly may these stipulations be interpreted? How may Utilities determine whether these criteria are met?

The question of various CDWR departing load charges was raised. Ken Krich said that the legislature intentionally left it CDWR charges out of AB 2228, thereby implicitly exempting biogas digesters from departing load charges. The Reply Comments on the Settlement Agreement before the CPUC supports this position.

## **Other Discussion Issues:**

### **Consistency:**

Discussions included the following: Should Utilities have a consistent net metering set of rules? It was generally felt that this would be a good idea, and over time, the goal should be to develop consistent rules for all California Utilities where possible.

### **Rule 21 Changes:**

It was also felt that a process should start to modify Rule 21 such that it addresses more fully Net Metering issues.

### **Hybrid Metering:**

Should metering for Net Metering renewable and non-Net Metering non-renewable energy, such as cogen, on the same account be allowed?

The Utilities felt that there are special rules for Net Metering renewables, which do not extend to non-renewables. Current Utility policy is therefore that separate metering may be installed for renewable energy (including all renewable hybrids, such as wind and solar), but separate metering be installed for DG that is not renewable.

While some felt that there should be a mechanism for using the same meters for both Net Metering renewables and non-renewables for the same customer, the Utilities felt that current regulations did not give them license to do so. Should future regulation or legislation provide further guidance, they would comply. In the meantime, there is a mechanism that allows for both renewable and non-renewable generation by the same customer, provided the metering is separate.

Some customers have installed solar for peak shaving or other purposes to buttress their non-renewable generators, but these customers do not have Net Metering.

SMUD also does not accept common metering for cogen and Net Metering.

### **Nameplate Rating:**

The debate was whether the Nameplate rating should be the greater or the lesser of the nameplate rating of:

1. Installed generation capacity
2. Inverter capacity

It was decided to continue this discussion at a future Rule 21 Working Group meeting with more technical people present.

**Future Plans:**

The stakeholders were urged to think through the several issues raised at the meeting, and to consider documenting their positions, if possible offering “straw man” language towards defining their positions. If there is sufficient interest, a Net Metering discussion forum could be formed, using one of the following options:

- o Independent of the Rule 21 Working Group
- o As an adjunct to the Rule 21 Working Group
- o As part of the Rule 21 Working Group

Respectfully Submitted:

A handwritten signature in black ink that reads "Edan Prabhu". The signature is written in a cursive, flowing style.

Edan Prabhu

Approved:

***Scott Tomashefsky***

Scott Tomashefsky